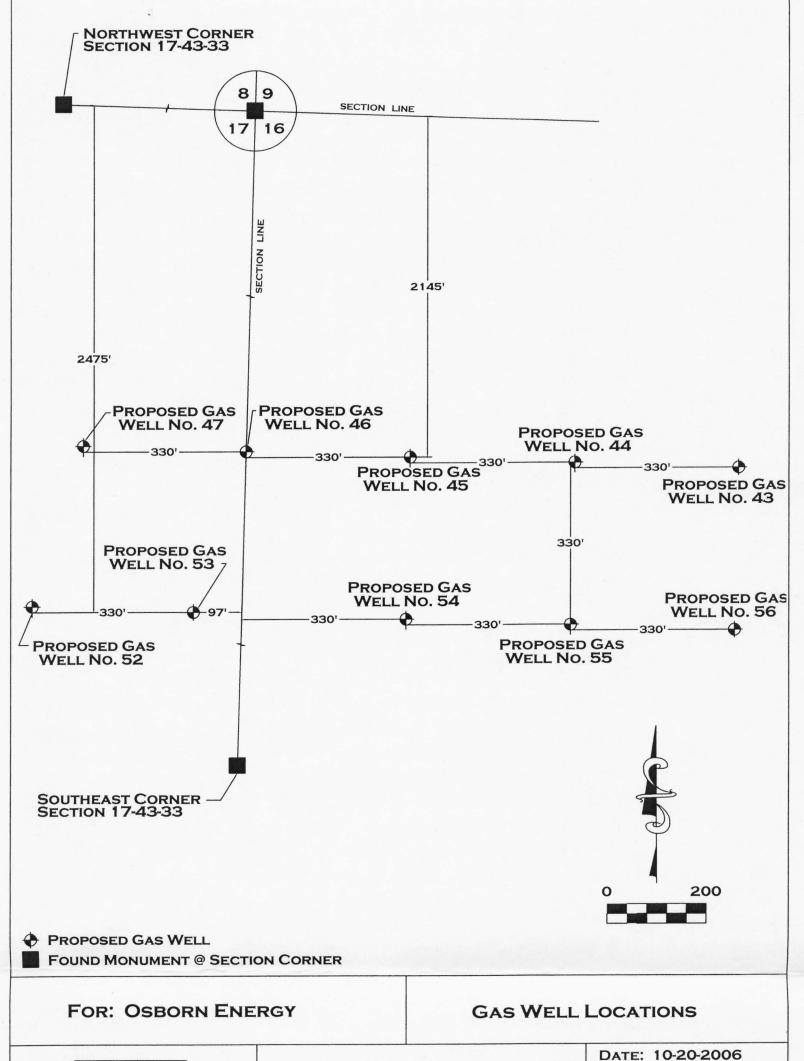


STATE OF MISSOURI MISSOURI DEPARTMENT OF NATURAL RESOURCES GEOLOGICAL SURVEY PROGRAM

## APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

☐ APPLICATI			☐ DEEPEN	V PLU	JG BACK ⊠	FOR AN	OIL WELL	-	OR	GAS WEI	LL
NAME OF COMPANY		OR					DA	TE			
Osborn Energ	y, LLC								2006		
ADDRESS					CITY			ATE		CODE	
24850 Farley	OF WE	LAND	15405		Bucyrus		K	S	66	013	
DESCRIPTION NAME OF LEASE	OF WEL	L AND	LEASE		WELL NUMBER		ELI	EVATIO	N (GROUN	0	
Osborn					54-16			90'			
WELL LOCATION				(GIVE FOOTAG	GE FROM SECTION LINE	S)	100				
		2475 f	t. from 🛛 North 🗌	South section lin	ne 330 ft. from	☐ East ☑	West section	on line	9		
WELL LOCATION					LATITUDE	LONGITUDE		UNTY			
Sec. 16 Town	ship 43	North	Range 33 🔲 E	East 🛛 West			C	ass			
NEAREST DISTANG	CE FROM F	ROPOSE	D LOCATION TO PE	ROPERTY OR LEAS	E LINE 165 FEET						
	PROPOSED				ED OR APPLIED - FO						
PROPOSED DEPTH			CONTRACTOR, NAME	AND ADDRESS		ROTARY	OR CABLE TOO	LS A	APPROX. DA	ATE WORK WIL	LL START
600'		Obborr	n Energy, LLC			air			1/06/20	006	
NUMBER OF ACRES I	NLEASE	NUMBER	OF WELLS ON LEA	SE INCLUDING THE	S WELL, COMPLETE	D IN OR DRI	LLING TO TH	IS RES	ERVOIR !	8	
4000		NUMBER	OF ABANDONED W	VELLS ON LEASE N	lone						
IF I FASE PURCHA	SED WITH	ONE OR N	MORE WELLS DRILL	ED FROM WHOM	PURCHASED?		NO. OF WE	LLS	PROD	UCING	
NAME									INJE	CTION	
										CTIVE	
ADDRESS							1		ABAND		
STATUS O	F BOND		SINGLE WELL AMOUNT \$		BLANKET BOND     AMOUNT \$ 34000.00			☐ ON FILE			
	PROPO	SED CAS	ING PROGRAM		APPROVE	D CASING -	TO BE FILLE	DINE	Y STATE	GEOLOGIST	r
AMOUNT	SIZ	Ε	WT/FT	CEMENT	AMOUNT				/FT	CEME	ENT
20'	7"			to surface	20'		7 "			Portland t	to Sufac
600'	2 7/8	3"		to surface	600'	1 2	7/8 4			- (1	U
report, and that t	his repor	t was pr	epared under m		mpany), and that I						
complete to the I	1	A					DAT	E .	0 20	- 201	~
PERMIT NUMBER	1 in	mul	1.10	an				10	165	, 200	10
	2	077	6	☐ DRILLER'S LOC	G REQUIRED		E-LOGS REC	UIRE	DIFRUN		
APPROVED DATE	11-	1-0		☐ CORE ANALYS	IS REQUIRED IF RUN JUIRED	v 🗆	DRILL SYSTE	EM TE	ST INFO F	REQUIRED IF	RUN
APPROVED BY	Nuc SE	)	March	SAMPLES NOT WATER SAMPL		OR TO AM	UV OTHER	1.00	ATION		
		-						-		PROPOSEE	7
All			AND GAS COUNC ALIFICATIONS OF T		STITUTE ENDORSEM	IEN I OF THE	E GEOLOGIC	MEHIT	S UF THE	PHOPOSED	
I, Agent of the Capproval of this p	ELLC (0	Compan	y), confirm that a	an approved dril	ling permit has be a permit number a		ure of author	rized			
DRILLER'S SIGNATURE	1/1	mtl	t. le	m			DATE	Id	25	, 200	6





JOHN RENNER
LAND SURVEYOR
6247 BROOKSIDE BOULEVARD
SUITE 204

KANSAS CITY, MO 64113 816-333-8841 NOTES:

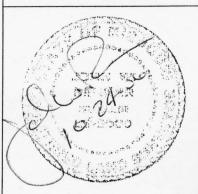
THIS IS NOT A BOUNDARY SURVEY. IT IS FOR PROPOSED GAS WELL LOCATION.

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NOV 0 1 2006

Mo Oil & Gas Council

JOB No.: 10-06-024





STATE OF MISSOURI MISSOURI DEPARTMENT OF NATURAL RESOURCES GEOLOGICAL SURVEY PROGRAM



FEB 13 2009

	. 10 01 11 111	
WELL COMPLETION	OR RECOMPLETION REPORT AND WELL I	LOG

NEW WELL DRY	] WORKOVE	R DEE	PEN [] I	PLUG BACK	"	NJECTION	L SAM	/IL / IL	SERVOIR	☐ DIF	- FERSO	TOTT	8" G	15	Council
OWNER							ADDRESS								
Osborn Energ	y, LLC						2485 WELL N		rley, Bu	ucyrus	s, KS 6	6013			
							54-16 CK AND SURVEY LATITUDE LONGITUDE							LONGITUDE	
Sec. 16 Twp 43 North, Rng 33 East West OR 2475 ft. from North										TEast	⊠West	1	ATTIONE		LONGITODE
COUNTY	torar, rang <u>s</u>			C-3 OR OGC-											
Cass 20776															
DATE SPUDDED DATE TOTAL DEPTH REACHED DA					DATE COMPLETED READY TO PRODUCE OR INJECT			ELEVATION (DF, RKR, RT, OR Gr.) FEET				ELEVATION OF CASING HD. FLANGE			
11/6/2006 11/9/2006				6/9/2007					990				FEET		FEET
TOTAL DEPTH		PLUG BACK	( TOTAL DE	EPTH											
518 PRODUCING OR INJE	CTION INTERV	(AL (S) EOR T	HIS COMPI	ETION			TROTAR	y TOO	LS USED (IN	ITERVAL	,		CABLET	OOLS	USED (INTERVAL)
443-453	OTIOIV IIVIETI	AL(O) TOTT	no oomi i				0 TO 51	8			-,		0,000		(
WAS THIS WELL DIRE	CTIONALLY D	RILLED?	WAS DIR	ECTIONAL SU	RVEY	MADE?			ID USED air		RVEY FILED	)?	DATE FI	LED	
Yes	⊠ No		☐ Ye		⊠ N		Berned	es		⊠ No	0				
TYPE OF ELECTRICAL		OGS RUN (JL	IST LOGS F	ILED WITH TH	HE STA	TE GEOLO	GIST)						DATE FI	LED	
Gamma Ray N	Neutron					CASING	RECO	20						a con	
CASING (REPOR	RT ALL STE	INGS SET	IN WEL	L - CONDL					MEDIATE.	PROD	DUCING.	ETC.			
PURPOSE	1	E DRILLED		E CASING S	-		HT (LB. F		DEPTI			CKS CEN	MENT	AN	OUNT PULLED
Surface				7"		17			20'		6				
Production	6 1/4"		27/	8"	8" 6 1/2"			518			108				
	011 0 174 2 170 0 172 0 100														
	TI	BING RE	CORD								INER F	RECOR	D		
SIZE	TU DEPTH SET	BING RE	CORD ACKER SET	TAT SIZ	ZE		TOP			I MOTTOM	INER F		D CEMENT		SCREEN
SIZE	DEPTH SET		ACKER SET	TAT SIZ	ZE	INCH	TOP	FEE	BC	MOTTO	LINER F				SCREEN FEET
	DEPTH SET	P	ACKER SET	ET	ZE				BC	MOTTO	FEET	SACKS	CEMENT		
	DEPTH SET	EET P	FECO	ET		INCH		AMOL	BC	RACT	FEET URE, C	SACKS	CEMENT	EZE	FEET
INCH	PERFO	DRATION	FE RECO	RD DEPTH		INCH		AMOL	BC SHOT, F	RACT	FEET URE, C	SACKS	T SQUE	EZE	FEET E RECORD ERVAL
INCH NUMBER PER FE	PERFO	DRATION SIZE AND T	FE RECO	RD DEPTH	H INTE	INCH		AMOL	BC SHOT, F	RACT	FEET URE, C	SACKS	T SQUE	H INT	FEET E RECORD ERVAL
INCH NUMBER PER FE	PERFO	DRATION SIZE AND T	FE RECO	RD DEPTH	H INTE	INCH ERVAL	AC	AMOU MA	BO SHOT, F JNT AND R ATERIAL U	RACT	FEET URE, C	SACKS	T SQUE	H INT	FEET E RECORD ERVAL
NUMBER PER FE	PERFO	DRATION SIZE AND T	RECOL	RD DEPTH	H INTE	INCH ERVAL 53	AC ODUC	AMOUNTION	BO SHOT, F JINT AND R ATERIAL U	RACT KIND OF	FEET URE, C	EMEN.	CEMENT  F SQUE  DEPTI	H INT	FEET E RECORD ERVAL
NUMBER PER FE  2  DATE OF FIRST PROD	PERFO	DRATION SIZE AND T	FE RECOL	DEPTH 44	13-45 INI	INCH ERVAL 53	ACODUC <sup>*</sup>	AMOUNTION	BO SHOT, F JINT AND R ATERIAL U	RACT KIND OF	FEET URE, C	EMEN.	CEMENT  F SQUE  DEPTI	H INT	FEET E RECORD ERVAL
NUMBER PER FE	PERFO	P/ DRATION SIZE AND T 2" DML F	PRICE SIZE	DEPTH  44  ODUCING ME  LIMPING 1  OIL PRODUCE	INITHOD (1/2"	INCH ERVAL 53 TIAL PR	ACODUC <sup>*</sup> FLOWING	AMOU MA	BO SHOT, F JINT AND R ATERIAL U	RACT KIND OF	FEET URE, C	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET E RECORD ERVAL
NUMBER PER FE  2  DATE OF FIRST PROCE 6/9/2007  DATE OF TEST	DEPTH SET FI PERF(	P/ DRATION SIZE AND T 2" DML F	PRICE SIZE	DEPTH 44	INITHOD (1/2"	INCH ERVAL 53 TIAL PR	ACODUC <sup>*</sup> FLOWING	AMOU MA	BO SHOT, F UNT AND MATERIAL U	RACT KIND OF	FEET URE, C	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET E RECORD ERVAL 53
NUMBER PER FE  2  DATE OF FIRST PROCE 6/9/2007  DATE OF TEST	DEPTH SET FI PERF(  EET  DUCTION OR IN HOURS TEST	P/ DRATION SIZE AND T 2" DML F	PRICE SIZE	DEPTH  44  ODUCING ME  LIMPING 1  OIL PRODUCE  TEST	INITHOD (1/2"	INCH ERVAL 53 TIAL PR (INDICATE II ' insert I	ACODUC <sup>*</sup> FLOWING	AMOUNTION GAS	BO SHOT, F UNT AND MATERIAL U	RACT KIND OF USED	FEET URE, C	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET E RECORD ERVAL 53 E OF PUMP.) GRAVITY
NUMBER PER FE  2  DATE OF FIRST PROCE 6/9/2007  DATE OF TEST  TUBING PRESSURE	PERFORMANCE  DUCTION OR IN HOURS TEST	P/ DRATION SIZE AND T 2" DML F	PRECOLUMN PRODUCTION OF THE PR	DEPTH  44  ODUCING ME  JIMPING 1  OIL PRODUCE TEST  2 BBLS  ATED RATE O  CTION PER 24	INI	INCH ERVAL 53 TIAL PR (INDICATE II ' insert I	ODUC F FLOWING Dbl GAS PRO	TION G, GAS	BOOK FILE OF THE PROPERTY OF T	RACT KIND OF USED	FEET URE, C  - IF PUMPI WATER PF TEST 2 B	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET FRECORD ERVAL 53 FOR PUMP.) GRAVITY API (CORR.)
NUMBER PER FE  2  DATE OF FIRST PROC 6/9/2007  DATE OF TEST	PERFORMANCE  DUCTION OR IN HOURS TEST	P/ DRATION SIZE AND T 2" DML F	PRECOLUMN PRODUCTION OF THE PR	DEPTH  44  ODUCING ME  JIMPING 1  OIL PRODUCE TEST  2 BBLS  ATED RATE O  CTION PER 24	INI	INCH ERVAL 53 TIAL PR (INDICATE II ' insert I	ACODUCT F FLOWING	TION G, GAS	BOOK TO BE	RACT KIND OF USED	FEET URE, C  - IF PUMPI WATER PF TEST 2 BI WATER	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET FRECORD ERVAL 53 FOR PUMP.) GRAVITY API (CORR.)
NUMBER PER FE  2  DATE OF FIRST PROCE 6/9/2007  DATE OF TEST  TUBING PRESSURE	DEPTH SET FI PERFO  CEET  CASING PE	PARATION SIZE AND T 2" DML F AJECTION ED CHOKE THER VENTER	PRECOLUMN PRODUCTION OF THE PR	DEPTH  44  ODUCING ME  JIMPING 1  OIL PRODUCE TEST  2 BBLS  ATED RATE O  CTION PER 24	INI	INCH ERVAL 53 TIAL PR (INDICATE II ' insert I	ACODUCT F FLOWING	TION G, GAS	BOOK TO BE	RACT KIND OF USED	FEET URE, C  - IF PUMPI WATER PF TEST 2 BI WATER	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET FRECORD ERVAL 53 FOR PUMP.) GRAVITY API (CORR.)
DATE OF FIRST PROD 6/9/2007 DATE OF TEST TUBING PRESSURE DISPOSITION OF GAS	DEPTH SET FI PERF( EET  DUCTION OR IN HOURS TEST 24  CASING PR  CASING PR	P/ DRATION SIZE AND T 2" DML F  AJECTION ED CHOKE THER VENTER CONTENTS	PRECOLUMN PRODUCTION OF THE PR	DEPTH  44  ODUCING ME  JIMPING 1  OIL PRODUCE TEST  2 BBLS  ATED RATE OF CITION PER 24  OR FUEL OR S	INI	INCH ERVAL 53 TIAL PR (INDICATE II ' insert I	ACODUCT F FLOWING	TION G, GAS	BOOK TO BE	RACT KIND OF USED	FEET URE, C  - IF PUMPI WATER PF TEST 2 BI WATER	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44	H INT	FEET FRECORD ERVAL 53 FOR PUMP.) GRAVITY API (CORR.)
DATE OF FIRST PROD 6/9/2007 DATE OF TEST TUBING PRESSURE DISPOSITION OF GAS METHOD OF DISPOSA Let water evap	DEPTH SET FI PERFO SET CASING PA CAS	PARATION SIZE AND TO 2" DML F  DECTION  CHOKE THER VENTER  CONTENTS  en fill pit	PRODUCTION OF THE PRODUCTION O	DEPTH  44  DEPTH  44	INI INI ITHOD ( 1/2" SS DF HOUR	INCH ERVAL 53 TIAL PF (INDICATE II I insert II RING RS	ODUCT FLOWING	AMOUNTION MARKET	BOOMER  BOOMER	RACT (IND OF	FEET URE, C  - IF PUMPI WATER PF TEST 2 B WATER 2 BBLS	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44  W SIZE ANI  DURING	H INT  13-4  OIL  GAS	FEET FRECORD  ERVAL  53  E OF PUMP.)  GRAVITY  API (CORR.)  S OIL RATIO
DATE OF FIRST PROD 6/9/2007 DATE OF TEST TUBING PRESSURE DISPOSITION OF GAS METHOD OF DISPOSA Let water evap CERTIFICATE: to make this rep	DEPTH SET FI PERFO  CEET  CASING PR  CASING	PARATION SIZE AND TO 2" DML FOR THE PROPERTY OF THE PROPERTY O	PRODUCTION OF THE PRODUCTION O	DEPTH  44  DEPTH  44	INI INI ITHOD ( 1/2" SS OF I HOUR	INCH ERVAL 53 TIAL PF (INDICATE II I insert II RING RS	ODUCT FLOWING	AMOUNTION MARKET	BOOMER  BOOMER	RACT (IND OF	FEET URE, C  - IF PUMPI WATER PF TEST 2 B WATER 2 BBLS	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44  W SIZE ANI  DURING	H INT  13-4  OIL  GAS	FEET FRECORD  ERVAL  53  E OF PUMP.)  GRAVITY  API (CORR.)  S OIL RATIO
DATE OF FIRST PROD 6/9/2007 DATE OF TEST TUBING PRESSURE DISPOSITION OF GAS METHOD OF DISPOSA Let water evap	DEPTH SET FI PERF  DUCTION OR IN HOURS TEST  24 CASING PR  AL OF MUD PIT DOORATE, the I, the Uncount, and the hoplete to the	PARATION SIZE AND TO 2" DML F  SIZE AND TO CHOKE THER VENTER CONTENTS OF fill pit dersigned this rep of best of NATURE	PRODUCTION OF THE PRODUCTION O	DEPTH  44  DEPTH  44	INITE  13-45  INITE  1/2"  1/2"  1/2"  FOR HOUR	TIAL PRODUCTE IN INSERT IN	ODUCT FLOWING	AMOUNTION MARKET	BOOMER  BOOMER	RACT (IND OF	FEET URE, C  - IF PUMPI WATER PF TEST 2 B WATER 2 BBLS	EMEN NG, SHOW	CEMENT  F SQUE  DEPTI  44  W SIZE ANI  DURING	H INT  13-4  OIL  GAS	FEET FRECORD  ERVAL  53  E OF PUMP.)  GRAVITY  API (CORR.)  S OIL RATIO

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## **Geological Report**

FEB 13 2009

#### **Osborn 54-16**

Mo Oil & Gas Council

Section 16-T43N-R33W Cass Co., Missouri Permit #20776 Elevation:

Drilling Contractor: Osborn Energy, LLC

Spud 11-06-06

Total Rotary Depth: 518' on 11-09-06

Formation	Driller Log Tops	Datum
Anna Shale (Lexington)	372'	
Summit Shale	418'	
Mulky Coal/Shale	438'	
Squirrel Sand	440'	
Total Depth	518'	

440-444 SS: clear, fine grained, angular to sub-rounded, moderately sorted, slightly micaceous

444-451 SS: clear, brown oil stain, fine grained, angular to sub-rounded, moderately sorted, slightly micaceous, strong odor, free oil

451-453 LS: brown, sandy, free oil

454-518 SH: gy

Total Depth 518' on 11-09-06

Brief Summary

Lexington Small open flow

Squirrel Sand 9' of pay, moderate bleed

RECERVED

FEB 13 2009

CONSOLIDATED OIL WELL SERVICES, **1988.** L, L, C, C, CO. BOX 884, CHANUTE, KS 66720 320-431-9210 OR 800-467-8676

LOCATION 0 + + aug Gas Counci FOREMAN Alan Made

## TREATMENT REPORT & FIELD TICKET

				CEMEN	IT			
DATE	CUSTOMER #	WEL	L NAME & NUM		SECTION	TOWNSHIP	RANGE	COUNTY
12.27.0 CUSTOMER	6 6073	Og bor	1 45	4			C	155. Mo
0560	rn Ene	2554			TRUCK #	DRIVER	TRUCK #	DRIVER
1AILING ADDRE	SS				389	Alumad		
2480	50 Far	1/21/			368	Max Mad		
TITY		STATÉ	ZIP CODE		122	Ken Hom.		
Buc	1845	153			1.0.0	1,000		
OB TYPE LO	ng String	HOLE SIZE	1/4	HOLE DEPTH	518	CASING SIZE & W	EIGHT 2?	18
ASING DEPTH	502"	DRILL PIPE		_TUBING			OTHER	
LURRY WEIGH	T	SLURRY VOL_		WATER gal/s	k	CEMENT LEFT in	CASING	
ISPLACEMENT		DISPLACEMEN	T PSI	MIX PSI		RATE		
EMARKS: W	ashed	7 Join	to of	LUS! 45	in.	Mixed o	2 pump	red
2004	sel to	cono	lition	well.	Mix	ed & Du	march	11152
50 150	202	270 60	1. Cir	enlate	devt.	ra ceme	nt to	cloan
hole.	Flush	ed Du	mp cl4	ean f	umped	21/2 0/4	c +12	Casine
TD.	Well V	reld 6	00世。		ed va	100	, , ,	0
Cust	omer su	polied	water.					
						11	0	
					///	an Illa	rder,	
,								
CODE	QUANTITY	or UNITS	DI	ESCRIPTION of	SERVICES or PR	орист	UNIT PRICE	TOTAL
5401	1		PUMP CHARG	·c		7/ 5		000
CUOL		502	MILEAGE	, C		767		800.00
5700	50	27/	Park	11		308		13/30
3700	36		Lasia	5 50019	se	123		247
SYULA			Ton	ites		1dd		271.61
11107	1.0	2 #	1					T(1 + 0
11180	426		500	~				59.08
1124	10	85x	50/5	POZ				955,80
4402			2/2	plus				955.80
				, ,				
								2240,05
						-, 00		40 7 4
						6.8%	SALES TAX	70.37
				1	1-0.		ESTIMATED	2310 42
HTHODIZATION				TITLE DOLE	F211281	1	DATE ST	
UTHORIZATION_						-11	de Mo	yer!

## **CEMENTING WORK ORDER**

# CONSOLIDATED OIL WELL SERVICES, INC. Phone (620) 431-9210 Chanute, Kansas 66720

	DAT		vved
	DATE		12/27/2006
		Mon	th / Day / Time
NAME OF CUSTO	MER:		Osborn
LEASE # Osborr		WELL#	
JOB DESCRIPTIO	N	cer	m
PIPE SIZE:	2 7/8	SIZE OF HO	LE: 6 1/4
DEPTH OF WELL:		518	3
TYPE OF RIG:			
AMOUNT OF CEM	ENT NEEDE	D:	111 sks 50/50 Poz
			2%
			422# gel
TRUCKS: VAC	TRANSPO	RT	
LOCATION OF JOB			
	389-AM, 36	8-MM, 122-KH	1
ORDER TAKEN BY:		Jim Green	
		Aut (Alect)	

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